CLAIMS

1. A method for the geometric measurement of a material strip (2),
   - with which, by means of a first measuring device, the strip thickness is determined at at least one measurement point (12) arranged in the material strip (2),
   - with which, by means of a second measuring device, the shape and spatial location of the material strip (2) is determined relative to a reference position, and
   - with which a correction of the measured values of the first measuring device is carried out by the measured values of the second measuring device.

2. The method according to Claim 1,
   - with which the material strip (2) is penetrated at the minimum of one measurement point (12) by the radiation (10, 11) from at least one radiation source (6, 7) and
   - with which the reduction in the intensity of the radiation (10, 11) caused by the material strip (2) is determined by at least one detector (8, 9).

3. The method according to Claim 2,
   - with which measured values are recorded at a plurality of measurement points (12), whereby the measurement points are arranged at a distance transverse to the longitudinal direction specified by the material strip (2),
   - with which, at predetermined intervals in the longitudinal direction, a series of measurements

essentially comprising all the measurement points (12) is recorded, and

- with which the thickness of the material strip (2) is calculated for each measurement point (12) acquired.

4. The method according to Claim 2,
   - with which each measurement point (12) is acquired in each case by at least two detectors (8, 9), which in each case detect radiation (10, 11) at different spatial angles.

5. The method according to Claim 1,
   - with which, on the surface of the material strip (2), with a second measuring device designed as an optical projection device (13), at least one line is projected, running essentially perpendicular to the longitudinal direction,
   - with which the line is detected by means of a camera (14), and
   - with which, from the minimum of one line recorded by the camera (14), the shape and spatial location of the material strip (2) along the line is determined.

6. The method according to Claim 5,
   with which the minimum of one line created by the projection device (13) is aligned in such a way that it runs through the minimum of one measurement point (12) of the first measuring device.

7. The method according to Claim 5,
   - with which a grid of lines is projected, located at a distance from one another in the longitudinal direction of the material strip (2),

- with which the line grid is recorded with the aid of a camera (20), and
- with which, on the basis of the evaluation of the shape of the line grid, the shape and spatial location of the material strip (2) is determined at least partially in the area of the material strip (2) comprised by the line grid.

8. The method according to Claim 1, with which the longitudinal contour and transverse contour of the material strip (2) are calculated from the measured values of the second measuring device.

9. The method according to Claim 8, with which the position of the minimum of one measuring point (12) inside the material strip (2) is determined by the measured spatial location and shape of the material strip (2) relative to the reference position.

10. The method according to Claim 5,
- with which the projected line is detected in the pixel matrix of the camera (14),
- with which the projected line is subtracted from the pixel matrix and the corresponding pixel co-ordinates are determined,
- with which the pixel co-ordinates are transformed into object co-ordinates, and
- with which the object co-ordinates are interpolated onto equidistant support points and referenced relative to a reference position.

11. The method according to Claim 10,
- with which, for the detection of the projected line in the pixel matrix, an upper and lower

range is determined for each pixel, seen in the Y-direction (pixel co-ordinates),

- with which the mean grey value is determined for both ranges,
- with which the greater of the two mean grey values is determined, and
- with which, when the grey value of the pixel under consideration lies by a predetermined amount above the greater mean grey value, the pixel under consideration is selected.

12. The method according to Claim 11,
    - with which, after the extraction of the line from the pixel matrix, small gaps between grouped and selected pixels are filled, and
    - with which a weighting process takes place in such a way that referred to each pixel in a weighing image is the number of selected pixels associated with it, as a grey value.

13. The method according to Claim 12,
    - with which, for the extraction of the projected line from the weighting image on the one hand and the original image on the other, for each X-co-ordinate (pixel co-ordinates) a vector is determined which describes a point on the projected line (pixel co-ordinates).

14. The method according to Claim 1,
    - with which the spatial positions of the edges of the material strip are measured, and
    - with which the corrected actual width of the material strip (2) is calculated from the spatial position of the edges of the material strip (2)

and the determined transverse contour of the material strip (2).

15. A device for the geometric measurement of a material strip (2), in particular for carrying out the method according to one of Claims 1 to 14,
- with a first measuring device for the determination of the strip thickness in at least one measurement point (12) arranged in the material strip (2), and
- with first evaluation means for the evaluation of the measured values recorded by the first measuring device,

characterised in that
- a second measuring device is provided for the determination of the shape and spatial location of the material strip (2) relative to a reference position,
- that second evaluation means are provided for the evaluation of the measured values recorded by the second measuring device, and
- that correction means are provided for correcting the measured values of the first measuring device by the measured values of the second measuring device.

16. The device according to Claim 15,
characterised in that
- the first measuring device exhibits at least one radiation source (6, 7) and at least one detector (8, 9),
- whereby the radiation section, detected by the minimum of one detector (8, 9), of the radiation generated by the radiation source (6, 7) defines

a measurement point (12) arranged in the material strip (2).

17. The device according to Claim 16, characterised in that

- the first measuring device exhibits at least two radiation sources (10, 11), which are arranged transverse to the longitudinal direction and at a distance from one another,
- that the first measuring device exhibits a plurality of detectors (8, 9), which are arranged transverse to the longitudinal direction and at a distance from the radiation sources (10, 11),
- that the material strip (2) is arranged between the radiation sources (10, 11) and the detectors (8, 9),
- that the first evaluation means evaluate the measured values recorded by the detectors (8, 9),
- that in each case two detectors (8, 9) are aligned on two different radiation sources (10, 11), and form a pair of detectors (8, 9),
- that the axes formed in each case by the detectors (8, 9) of one pair and the radiation sources (10, 11) intersect essentially in the area of the material strip (2) and a measurement point is therefore specified, and
- that the first evaluation means evaluate from the measured values the thickness of the material strip (2) in the measurement points (12).

18. The device according to Claim 15, characterised in that

- the second measuring device exhibits a projection device (13), for preference a laser source,

- that the projection device (13) projects a line onto the surface of the material strip (2), and
- that the second measuring means exhibit a camera (14) for the acquisition of the projected line in a pixel matrix.

19. The device according to Claim 18, characterised in that, the light beam generated by the projection device (13) runs through the minimum of one measuring point (12) of the first measuring device.

20. The device according to Claim 18, characterised in that
- the projection device projects a grid of lines onto the surface of the material strip (2), and
- that the second measuring device exhibits a camera (20) for the acquisition of the projected line grid.

21. The device according to Claim 20, characterised in that, one of the lines of the line grid runs through the minimum of one measurement point (12) of the first measuring device.